pathogenesis is not likely in a lesion of the lateral upper anterior abdominal wall. In view of this histologic similarity, however, one might question whether all the frequently encountered cysts of the peritoneal and subperitoneal tissues of the female pelvic organs, and especially of the parovarian tissues, are indeed wolffian as is generally assumed, or whether some of them are not simply mesothelial cysts. The variance of the cells lining some of the peritoneal cysts described in the literature, some being reported as lined by stratified squamous epithelium,[1] is not surprising since the tissue culture studies by Stout and Murray[12] demonstrated that the versatile serosal covering cells may produce epithelial, fibroblastic or combined tumors.

SUMMARY

A case of a solitary mesothelial cyst of the parietal peritoneum in a 60-year-old white woman is reported. The lesion caused extrinsic pressure on the gallbladder, and was excised. Symptomatic peritoneal cysts of this size are rare, but the possibility of the presence of such a lesion should be considered in the differential diagnosis of intraabdominal cystic lesions. The pathogenesis of peritoneal cysts is briefly reviewed.

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Acute Hemorrhage from Aberrant Pancreatic Tissue in the Gallbladder

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THE PRESENCE of aberrant pancreatic tissue in the gastrointestinal tract is not rare. It is noted about once in five hundred surgical operations.

The most common locations of aberrant pancreatic tissue are the stomach, the duodenum and the jejunum; less common locations are a Meckel's diverticulum, the capsule of the spleen and the gallbladder. The tissue is of congenital origin, probably becoming detached from the primary pancreatic anlage, then during development being transplanted to any of various positions and in different organs of the gastrointestinal tract.

The first case of aberrant pancreatic tissue in the gallbladder of a human was reported by von Hedry in 1924 (cited by Jacobson[2]). Since then five cases have been reported. In all the reported cases, the aberrant tissue was localized in the wall of the gallbladder and the symptoms were associated with calculi. In the case herein reported the lesion was not associated with calculi and the symptoms—acute inflammation with resultant hemorrhage into the gallbladder—were entirely due to changes in the tissue itself.

Diagnosis is only made by postoperative histological study of the removed gallbladder.

The symptoms are variable. There may be no symptoms, the diagnosis of gallbladder disease being made by the presence of calculi, with the aberrant tissue an incidental observation. In other instances the symptoms may depend on the pathological condition present within the aberrant tissue itself, such as inflammation, ulceration, hemorrhage or carcinoma.[3]

At operation the lesion may be observed as a mass in the wall of the gallbladder. It is usually soft and pulpy. In some instances the tissue may penetrate the mucosa and show dimpling due to the presence of pancreatic ducts, or it may show ulceration with or without signs of acute hemorrhagic cholecystitis.

Microscopically the appearance is typical of pancreatic tissue, with the presence of ducts and acini. Sometimes localized islands of Langerhans may be present.

REPORT OF A CASE

A man, 52 years of age, was admitted to the hospital July 5, 1960, with complaint of epigastric pain of one week's duration. It had begun rather suddenly following a drink of a cold nonalcoholic beverage. The pain was not referred to the shoulder or back, was confined mostly to the epigastrium, was not continuous but recurred on and off, and at times was severe. There was no nausea, vomiting or diarrhea.

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The patient had been a heavy drinker, but because of severe abdominal pain immediately after drinking, he had discontinued drinking alcohol more than a year previously.

Upon physical examination no jaundice was noted. The abdomen was tender with some rigidity in the right upper quadrant and extending into the epigastrium. Sounds of peristalsis were present. There was an infected wound on the right hand.

An x-ray film of the abdomen with the patient upright showed no subphrenic air and no dilatation of the small intestine. X-ray films of the chest showed diffuse emphysema.

The amylase value of the blood was 144 units and the transaminase content was within normal limits. Moderate elevation of urinary diastase was noted on two determinations. Results of urinalysis were within normal limits. Hemoglobin content of the blood was 15.1 gm. per 100 cc. and packed cell volume was 43 per cent. Leukocytes numbered 10,500 per cu. mm.—71 per cent polymorphonuclear cells, 25 per cent lymphocytes, 3 per cent eosinophils and 1 per cent stab cells.

The diagnosis was mild pancreatitis and the patient was treated conservatively.

Ten days later his condition was improved enough to permit further diagnostic studies. Serologic tests were negative for syphilis. In x-ray films of the gastrointestinal tract, a small hiatal hernia, with no reflux and no ulcer, was seen. No abnormalities were seen in barium enema films. Gallbladder studies, first with a normal amount of dye taken by mouth and then with a double dose, showed no filling. No calculi were visible. Cholecystectomy was contemplated but because of the infected hand it was thought best to send the patient home and have him return for elective cholecystectomy after the hand wound had healed.

The first day at home the patient had mild epigastric distress and on the second day an acute episode of severe pain in the right upper quadrant with vomiting. He was readmitted to the hospital. The temperature was 101° F. Extreme tenderness and rigidity were noted in the right upper quadrant of the abdomen and a tender mass was palpable there. Moderate leukocytosis was present. A diagnosis of acute cholecystitis was made and the patient was prepared for emergency operation.

There was a moderate amount of serosanguinous fluid in the abdominal cavity. The stomach and duodenum and the pancreas appeared normal. The gallbladder was greatly distended, edematous and thickened. Because of the huge distention, the gallbladder was emptied with trocar and suction, and bright red blood was obtained. When the distention was reduced the gallbladder could be better palpated. A nodule, thought to be a stone, was felt near the cystic duct. The common duct was not distended, and no calculi were palpable. Removal of the gallbladder from above downward was car-

Figure 1.—Cross-section showing ectopic pancreatic tissue in relationship to the gallbladder. There are areas of infection with very thickened and hemorrhagic mucosa of the gallbladder.

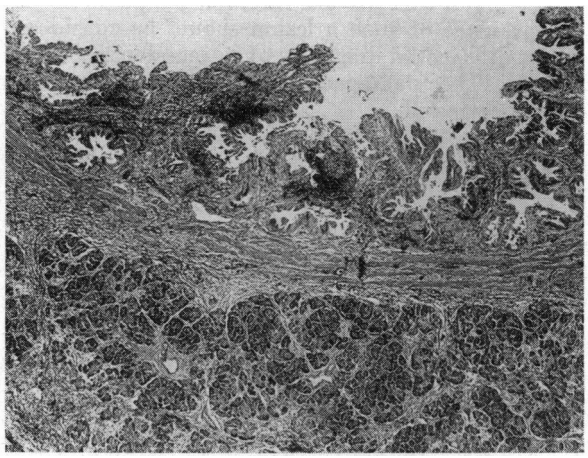

Figure 2.—Microscopic view of pancreas and gallbladder mucosa with areas of hemorrhage and fecal ulceration (×250).

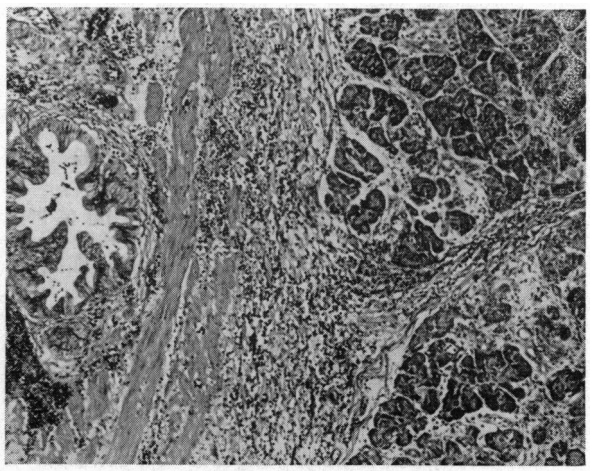

Figure 3.—High power view showing cellular infiltrate and pancreatic acini (×400).

ried out. The cystic duct and cystic artery were separately ligated and, after a drain had been placed in the pouch, the abdomen was closed in layers.

The patient was discharged from hospital on the seventh day.

Pathologist's Report

The gallbladder was 10 cm. long and 3.5 cm. in diameter. Edematous and firm, the wall of the gallbladder was 0.6 cm. thick. The lumen was filled with blood. The mucosa was grossly hemorrhagic, the hemorrhagic process extending down to the cystic duct (Figure 1). Three centimeters from the resected end of the mucosa was a 0.2 cm. area of ulceration, and beneath it and involved with it was a discrete nodule 1.0 x 0.5 cm. which resembled pancreas. No calculi were present.

Pronounced edema of serosa and muscular tissue was noted on microscopic examination of sections of the gallbladder. The muscularis showed hypertrophy and there was a heavy neutrophilic infiltration throughout all layers of the gallbladder. There was ulceration with heavy interstitial hemorrhage in the mucosa (Figure 2) and in the nodule which protruded into the mucosa. The acini and ducts were those of pancreatic tissue. They were dilated and showed squamous metaplasia. Numerous islets were present (Figure 3).

The pathologic diagnosis was: Acute hemorrhagic cholecystitis; acute hemorrhagic ectopic pancreatitis; focal ulceration of mucosa; ectopic pancreas, gallbladder; squamous metaplasia in the ducts.

COMMENT

From the clinical course in this case—first consistent with mild pancreatitis, then a sharp increase in pain and development of symptoms consistent with acute cholecystitis—and the conditions observed at operation and by pathological study, it appears that what actually happened was a sudden hemorrhage into the gallbladder. This occurrence was comparable to hemorrhage from aberrant pancreatic tissue such as is sometimes seen in the stomach and duodenum, the hemorrhage being produced by acute pancreatitis in the aberrant tissue with subsequent ulceration of mucous membrane.

We believe that all the symptoms were produced by changes in the aberrant pancreatic tissue itself.

SUMMARY

Ectopic pancreatic tissue in the gallbladder is a fairly uncommon occurrence. In most instances it is an accidental finding following cholecystectomy for calculi. In the case here reported the symptoms were produced by changes in the pancreatic tissue itself and no calculi were present.

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